PALM INTRANET

Day : Thursday
Date: 10/26/2006

Time: 22:36:43

# Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name.
Additionally, enter the **first few letters** of the Inventor's First name.

| **Last Name** | **First Name** | |
|---|---|---|
| Zeng | Xian-Ming | Search |

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page

# Refine Search

**Search Results -**

| Terms | Documents |
|---|---|
| L6 same (COPD) | 4 |

**Database:**
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

**Search:** L7

Refine Search

Recall Text Clear Interrupt

## Search History

**DATE: Thursday, October 26, 2006** Purge Queries Printable Copy Create Case

| Set Name side by side | Query | Hit Count | Set Name result set |
|---|---|---|---|
| *DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR* | | | |
| L7 | L6 same (COPD) | 4 | L7 |
| L6 | (dry adj powder) same lactose | 3980 | L6 |
| L5 | L4 same (MDPI or (multidose adj dry adj powder adj inhaler)) | 13 | L5 |
| L4 | L3 same (DPI or (dry adj powder adj inhaler)) | 1085 | L4 |
| L3 | (dry adj powder) same (formoterol or lactose) | 4049 | L3 |
| *DB=PGPB,USPT; PLUR=YES; OP=OR* | | | |
| L2 | (Xian-Ming) near Zeng | 3 | L2 |
| *DB=USPT; PLUR=YES; OP=OR* | | | |
| L1 | 6737044.pn. | 1 | L1 |

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 23:32:06 ON 26 OCT 2006)

FILE 'CAPLUS, MEDLINE, USPATFULL' ENTERED AT 23:32:22 ON 26 OCT 2006

L1 5604 S (DRY(W)POWDER) (P) (FORMOTEROL OR LACTOSE OR (DPI OR (DRY(W)P
L2 93 S L1 (P) (MDPI OR (MULTIDOSE(W)DRY(W)POWDER(W)INHALER))
L3 15 S L2 (P) CAPSULE
L4 15 DUPLICATE REMOVE L3 (0 DUPLICATES REMOVED)
L5 0 S L4 (P) COPD
L6 14 S L4 AND COPD
L7 14 FOCUS L6 1-
L8 111 S L1 (P) COPD
L9 37 S L8 (P) (DPI)
L10 29 DUPLICATE REMOVE L9 (8 DUPLICATES REMOVED)
L11 29 FOCUS L10 1-

L11 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2006 ACS on STN
TI Inhaled salmeterol/fluticasone propionate: a review of its use in chronic obstructive pulmonary disease
AB A review. The salmeterol/fluticasone propionate dry powder inhaler (DPI) [Advair Diskus, Seretide Accuhaler] contains the long-acting β2-adrenoceptor agonist salmeterol and the inhaled corticosteroid fluticasone propionate. In the US, twice-daily salmeterol/fluticasone propionate 50/250μg is approved for use in adults with chronic obstructive pulmonary disease (COPD ) associated with chronic bronchitis, and in the EU, the twice-daily 50/500μg dosage is approved for use in patients with severe COPD, repeat exacerbations and significant symptoms despite bronchodilator therapy. In patients with moderate-to-severe COPD , twice-daily inhaled salmeterol/fluticasone propionate 50/250 or 50/500μg for 24-52 wk improves predose forced expiratory volume in 1 s (FEV1) significantly more than salmeterol monotherapy, improves postdose or postbronchodilator FEV1 significantly more than fluticasone propionate monotherapy and results in clin. significant improvements in health-related quality of life. Salmeterol/fluticasone propionate 50/500μg significantly reduced annual COPD exacerbations, especially in severe COPD. Some corticosteroid-related adverse events were increased in recipients of fluticasone propionate with or without salmeterol vs. salmeterol monotherapy or placebo; withdrawal from fluticasone propionate, including combination therapy, needs careful management to minimize COPD exacerbations. The DPI combining a corticosteroid and long-acting β2-agonist provides benefits over monotherapy and may encourage patient compliance in COPD.

| | |
|---|---|
| ACCESSION NUMBER: | 2004:875675 CAPLUS |
| DOCUMENT NUMBER: | 142:147641 |
| TITLE: | Inhaled salmeterol/fluticasone propionate: a review of its use in chronic obstructive pulmonary disease |
| AUTHOR(S): | Fenton, Caroline; Keating, Gillian M. |
| CORPORATE SOURCE: | Adis International Limited, Auckland, N. Z. |
| SOURCE: | Drugs (2004), 64(17), 1975-1996<br>CODEN: DRUGAY; ISSN: 0012-6667 |
| PUBLISHER: | Adis International Ltd. |
| DOCUMENT TYPE: | Journal; General Review |
| LANGUAGE: | English |
| REFERENCE COUNT: | 79 THERE ARE 79 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT |

L11 ANSWER 8 OF 29 MEDLINE on STN
TI Performance of Turbuhaler((R)) in Patients with Acute Airway Obstruction and COPD, and in Children with Asthma : Understanding the Clinical Importance of Adequate Peak Inspiratory Flow, High Lung Deposition, and Low In Vivo Dose Variability.
AB The dry-powder inhaler (DPI) Turbuhaler((R)) has been on the market for nearly two decades. Products containing terbutaline, formoterol, budesonide, and the combination budesonide/formoterol are widely used by patients with asthma and COPD. Most patients and physicians find Turbuhaler((R)) easy to use, and local side effects are rare. This is thought to arise from the lack of additives or only small amounts in the formulation, in addition to minimal deposition of the drug in the oropharynx and on the vocal cords during inspiration.The function of Turbuhaler((R)) has frequently been questioned. This article aims to review and clarify some key issues that have been challenged in the literature (e.g. the effectiveness of Turbuhaler((R)) in patients with more restricting conditions), to discuss the importance of lung deposition, and to explain the low in vivo variability associated with Turbuhaler((R)) and the lack of correlation with the higher in vitro variability.Turbuhaler((R)), like other DPIs, is flow dependent to some

degree. However, a peak inspiratory flow (PIF) through Turbuhaler((R)) of 30 L/min gives a good clinical effect. These PIF values can be obtained by patients with conditions thought to be difficult to manage with inhalational agents, such as asthmatic children and adult patients with acute severe airway obstruction and COPD. Excellent clinical results with Turbuhaler((R)) in large controlled studies in patients with COPD and acute severe airway obstruction provide indirect evidence that medication delivered via Turbuhaler((R)) reaches the target organ.Due to the large amount of small particles and the moderate inbuilt resistance in Turbuhaler((R)), which opens up the vocal cords during inhalation, Turbuhaler((R)) is associated with a high lung deposition (25-40% of the delivered dose) compared with pressurized metered-dose inhalers (pMDIs) and other DPIs. A good correlation has been found between lung deposition and clinical efficacy. A high lung deposition always results in the best ratio between clinical efficacy and risk of unwanted systemic activity. Studies with Turbuhaler((R)) also show that the in vivo variation in lung deposition is significantly lower compared with a pMDI or, for example, the Diskus((R)) inhaler, and much lower than the in vitro dose variability seen in laboratory tests. Turbuhaler((R)) appears to be a reliable DPI which can be used with confidence by patients with airway diseases, including those with clinical conditions believed to be difficult to manage with inhalational therapy.

ACCESSION NUMBER: 2006505246 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 16928144
TITLE: Performance of Turbuhaler((R)) in Patients with Acute Airway Obstruction and COPD, and in Children with Asthma : Understanding the Clinical Importance of Adequate Peak Inspiratory Flow, High Lung Deposition, and Low In Vivo Dose Variability.
AUTHOR: Selroos Olof; Borgstrom Lars; Ingelf Jarl
CORPORATE SOURCE: SEMECO AB, Lund, Sweden.
SOURCE: Treatments in respiratory medicine, (2006) Vol. 5, No. 5, pp. 305-15.
Journal code: 101196148. ISSN: 1176-3450.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: NONMEDLINE; IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 25 Aug 2006
Last Updated on STN: 25 Aug 2006

L11 ANSWER 21 OF 29 MEDLINE on STN
TI Successful use of DPI systems in asthmatic patients--key parameters.
AB Effective inhalation therapy using pressurised metered dose inhalers (pMDIs) and dry powder inhalers (DPIs) is the cornerstone of asthma management. Previous studies have demonstrated difficulties in the usage of pMDIs in certain patient groups, especially as pMDis require the co-ordination of inhaler activation with dose inhalation. Almost all DPIs are breath-activated and preclude the need to co-ordinate activation with inspiration. Three key parameters for successful inhaler use should be considered when evaluating existing or future DPI devices: (1) compliance; (2) fine particle distribution and dependency on inspiratory flow and; (3) clinical efficacy. A threshold mechanism which controls for a minimal inspiratory flow rate is desirable in order to support formation of an optimal fine particle fraction (FPF) which in turn improves lung deposition. Additionally, in order to enhance patient compliance an optimal multidose DPI should feature a visual or acoustic feedback of a correct inhalation. The Novolizer is a multidose refillable DPI. It has multiple feedback mechanisms and a trigger flow valve system, which helps to ensure correct inhalation that allows adequate lung deposition, helps to reassure the patient that medication has been taken and might therefore improve patient compliance. The low-to-medium airflow

resistance translates into higher peak inspiratory flow (PIF) and makes the Novolizer DPI particularly suitable for the use in patients with reduced inspiratory flow rates. Clinical studies have shown that children, elderly patients, adults with moderate-to-severe asthma and COPD patients (stage IIa-III) are able to generate sufficient inspiratory flow to operate the Novolizer effectively. In contrast previous studies with other MDPIs (e.g. Turbuhaler or Aerolizer) demonstrated that in patient groups with severe obstructive lung disease or in children with asthma optimal inspiratory flow rates are not achieved in all patients.

ACCESSION NUMBER: 2004511541 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15481285
TITLE: Successful use of DPI systems in asthmatic patients--key parameters.
AUTHOR: Richter Kai
CORPORATE SOURCE: Pulmonary Research Institute, Hospital Grosshansdorf, Center for Pulmonology and Thoracic Surgery, Wohrendamm 30, 22927 Grosshansdorf, Germany.. k.richter@pulmoresearch.de
SOURCE: Respiratory medicine, (2004 Oct) Vol. 98 Suppl B, pp. S22-7. Ref: 17
Journal code: 8908438. ISSN: 0954-6111.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200412
ENTRY DATE: Entered STN: 15 Oct 2004
Last Updated on STN: 19 Dec 2004
Entered Medline: 7 Dec 2004

L11 ANSWER 28 OF 29 USPATFULL on STN
TI Dry powder inhalant composition
AB Dry powder pharmaceutical compositions having improved stability comprising a bronchodilator drug in combination with a steroidal anti-inflammatory drug, dry powder inhalers comprising the same and their use in the treatment of respiratory disorders by inhalation.

ACCESSION NUMBER: 2005:267682 USPATFULL
TITLE: Dry powder inhalant composition
INVENTOR(S): Bulsara, Pallav Arvind, Hertfordshire, UNITED KINGDOM
Roche, Trevor Charles, Hertfordshire, UNITED KINGDOM

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2005232998 | A1 | 20051020 | |
| APPLICATION INFO.: | US 2003-510968 | A1 | 20030410 | (10) |
| | WO 2003-GB1595 | | 20030410 | |
| | | | 20050509 | PCT 371 date |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | GB 2002-8609 | 20020413 |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GLAXOSMITHKLINE, CORPORATE INTELLECTUAL PROPERTY, MAI B475, FIVE MOORE DR., PO BOX 13398, RESEARCH TRIANGLE PARK, NC, 27709-3398, US
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 580
CAS INDEXING IS AVAILABLE FOR THIS PATENT.